



Internal Power Vent System

Installation, Operation and Owner's Manual

Please read this manual thoroughly before beginning the installation. It has information which is important for safe installation and operation.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

-- Installation and service must be performed by a qualified installer, service agency or the gas supplier.



Control Number 4006611

**INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.**

Mar 2015

TABLE OF CONTENTS

Important Safety Information	3
Product Information	4
Venting Requirements	8
Installation	11
Operating the System	18
Warranty	Appendix A

IMPORTANT SAFETY INFORMATION

Read these instructions carefully before installing or operating this system.

Symbol Legend:

The following terms are used throughout this manual to bring attention to the presence of potential hazards or to important information concerning the product.



Danger: Indicates an imminent hazardous situation which, if not avoided, will result in death, serious injury or substantial property damage.



Caution: Indicates an imminent hazardous situation which, if not avoided, may result in personal injury or property damage.



TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

1. This system is intended for use with European Home products ONLY.
2. Before servicing or cleaning the unit, switch the electric service off at the load center and lock the load center to prevent the power from being switched on accidentally.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with applicable codes and standards.
4. Follow the appliance manufacturer's guidelines and safety standards such as those published by the National Fire Protection Associations (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. This unit must be grounded.

PRODUCT INFORMATION

Thank you for purchasing an **Internal Power Vent System (IPVS)** by **European Home**. This system combines two great hearth product names; European Home and Enervex®. Where necessary, excerpts of the Enervex installation instructions are inserted into this manual and labeled with: **ENERVEX®**

As sold, the Enervex® components may be installed to accommodate a number of different fireplace models and types. However, when installed with an Element4 fireplace from European Home the Enervex® instructions excerpted in this manual are to be followed exclusively.

OVERVIEW

The **IPVS** is approved for use with the entire line of Element4 fireplaces and must be mounted internally and used with wall-mounted terminations ONLY. The **IPVS** consists of six main components:

1. a PV-GS-SGV-01 solenoid valve
2. a PV-WM-AS air separator (2 req'd.; PV-WM-FAS-01 and PV-WM-MAS-01)
3. a PV-GS-CM-ADC 100 system control with included PDS 1 proven draft switch
4. a PV-WM-146 power vent
5. a PV-ES-PLS-WHT-02 system switch
6. an E4-SA-WS-80 flame switch
7. an installation manual

The PV-WM-146 fan, which creates negative pressure within the venting, is mounted between two PV-WM-AS separators, one of which is mounted directly to the outside wall of the building. Inside of the building, the PDS 1 proven draft switch senses the draft pressure and signals the system controller. Once the draft has been established the solenoid valve is opened, the ready light is lit and the fireplace can be operated as usual.

The above components are all connected by customer-supplied wiring which must be in accordance with the requirements of the authority having jurisdiction or, in the absence of such requirements, with the National Electrical Code, NFPA70.

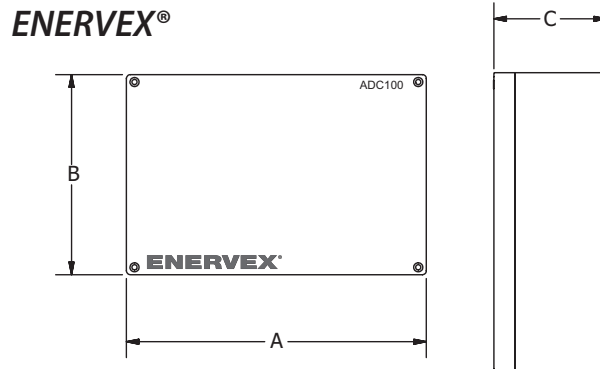
The installation of your **IPVS** will follow the steps below and this manual is laid out accordingly.

- **Installing the Fan and Fan Controls**
- **Installing the Solenoid Gas Valve**
- **Testing the System**

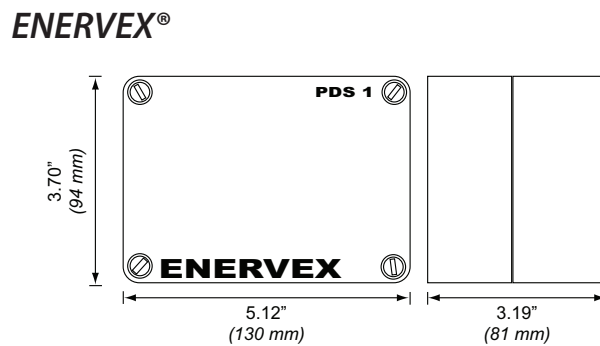
PRODUCT INFORMATION

SPECIFICATIONS

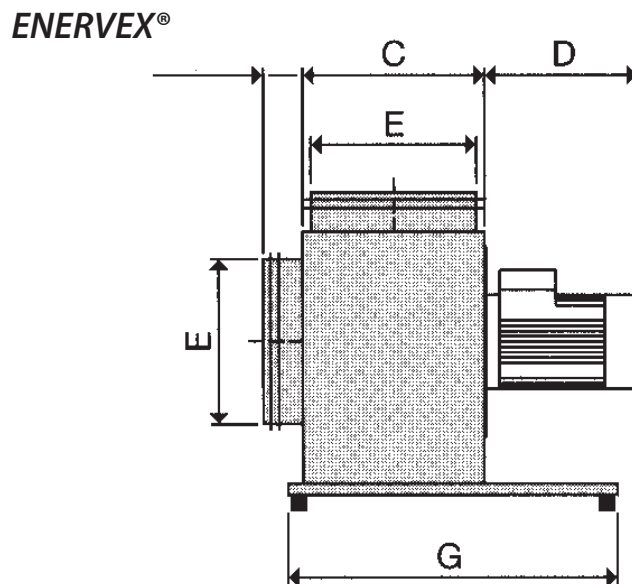
System Control (PV-GS-CM-ADC 100)	
Voltage	1 x 120V AC
Amperage	6.3
Draft Pressure	-0.05" w.c.
Weight	2.6 lbs.
Dimension (B)	6.3"
Dimension (A)	9.6"
Dimension (C)	3.5"



Proven Draft Switch (PDS 1)	
Temp. Limits	-40°F to +190°F
Draft Pressure	-0.05" w.c.
Weight	9.6 oz.
Max. Height	3.7"
Max. Width	5.1"
Max. Depth	3.2"

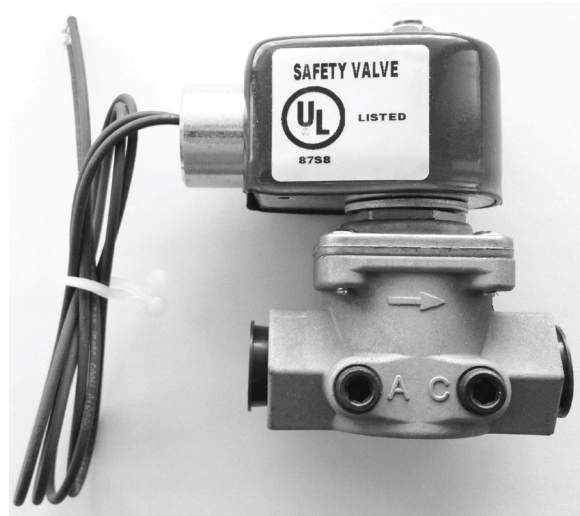


Fan (PV-WM-146)	
Voltage	1 x 120V AC
Amperage	1.2
RPM	1600
Horsepower	1/10
Weight	28 lbs.
Dimension (A)	13.6"
Dimension (B)	11.62"
Dimension (C)	7.88"
Dimension (D)	4.33"
Dimension (E)	6.0"
Dimension (G)	13.78"

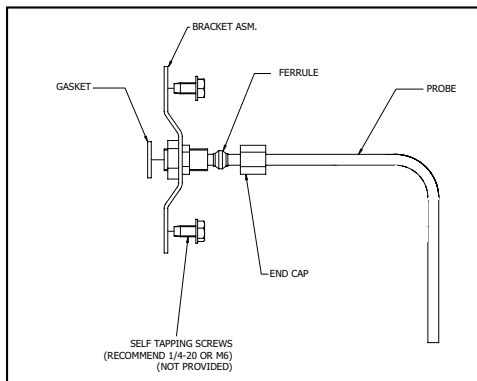


PRODUCT INFORMATION

Solenoid Gas Valve (PV-GS-SGV-01)	
Voltage	1 x 120V AC
Amperage	0.15
Temp. Limits	14°F to 176°F
Pipe Size	½" NPT
Max. Height	3.875"
Max. Length	3.5"
Max. Width	2.0"

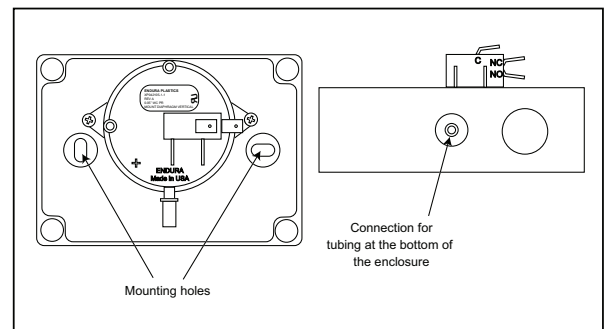


ENERVEX®



View of PDS 1 Stack Probe

ENERVEX®



View of PDS 1 with Cover Removed

System Switch (PV-ES-PLS-WHT-02)	
Voltage	1 x 120V AC
Amperage	15
Temp. Limits	-20°C to 60°C
Height	4.20"
Depth	0.97"
Width	1.32"
Faceplate	<i>not included</i>



PRODUCT INFORMATION

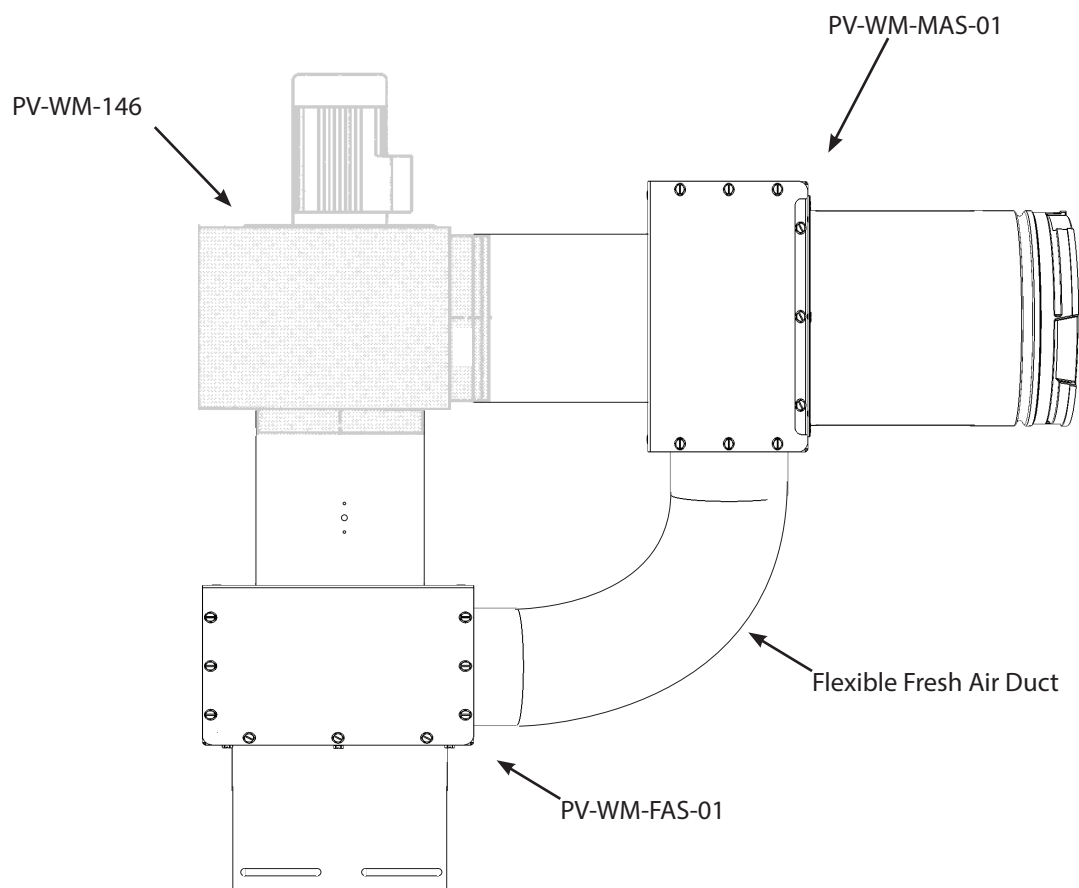


Figure 1. IPVS Assembly

VENTING REQUIREMENTS

The venting for a power vented fireplace is installed in the same manner as a non-power vented fireplace. The difference between the two types of venting is in the allowable distances. In all installations of this power vent system the following **MUST** be observed:

- With the **IPVS**, the maximum allowable horizontal or vertical length of the fireplace venting is 82 feet (25 meters.) This distance is measured between the top of the fireplace and the base of the termination.
- Only M&G DuraVent®-brand direct vent components are approved for use with the **IPVS**.
- The venting may have no more than five 90-degree elbows or ten 45-degree elbows or a combination not exceeding 450 'degrees of elbow'.
- The venting may turn down but it must not go below the base of the fireplace. See illustrations, below.
- The joints of each venting section must be properly sealed with approved tape or caulk.

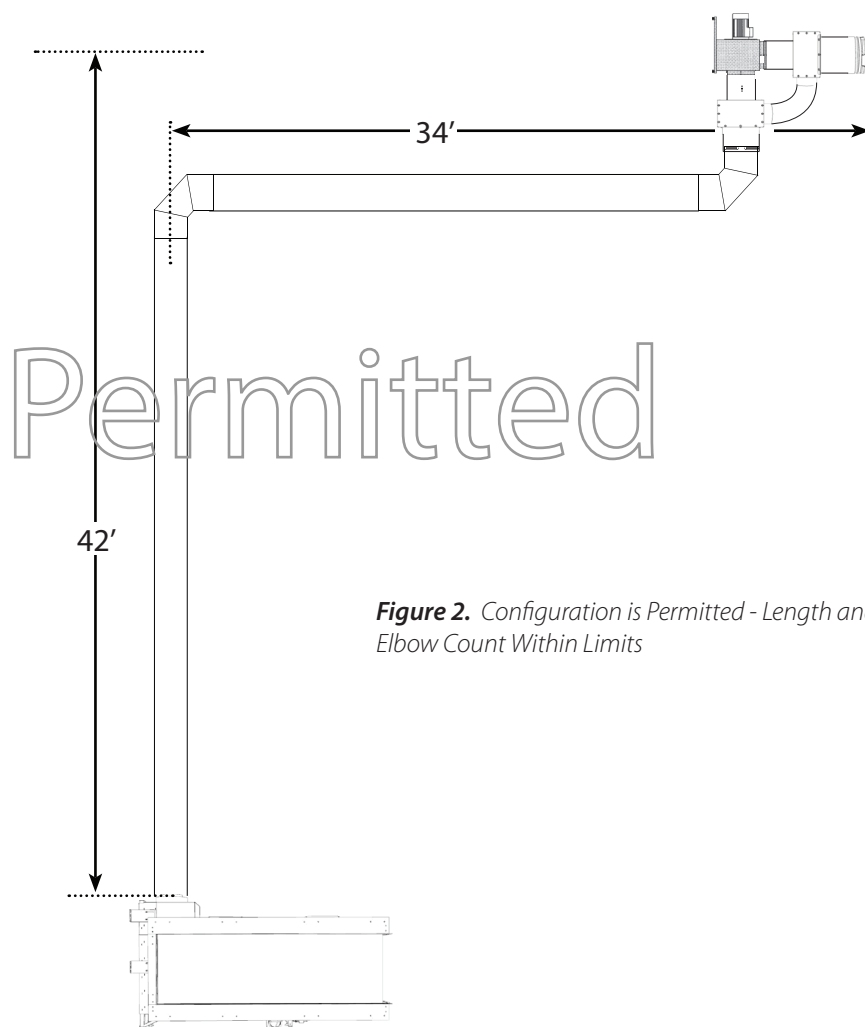
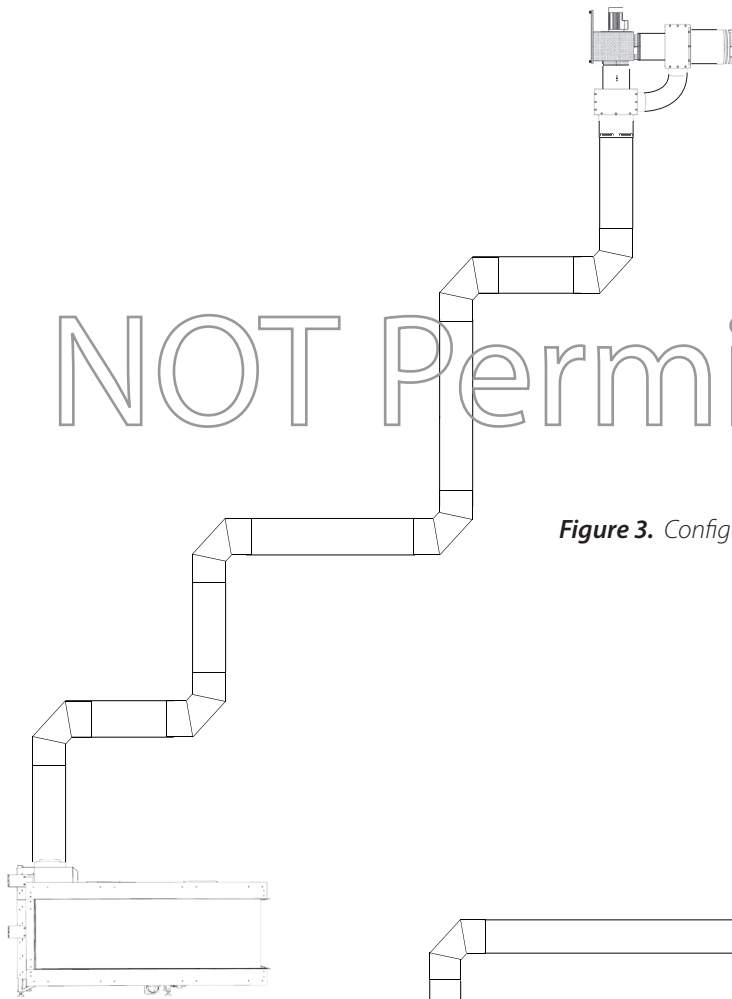


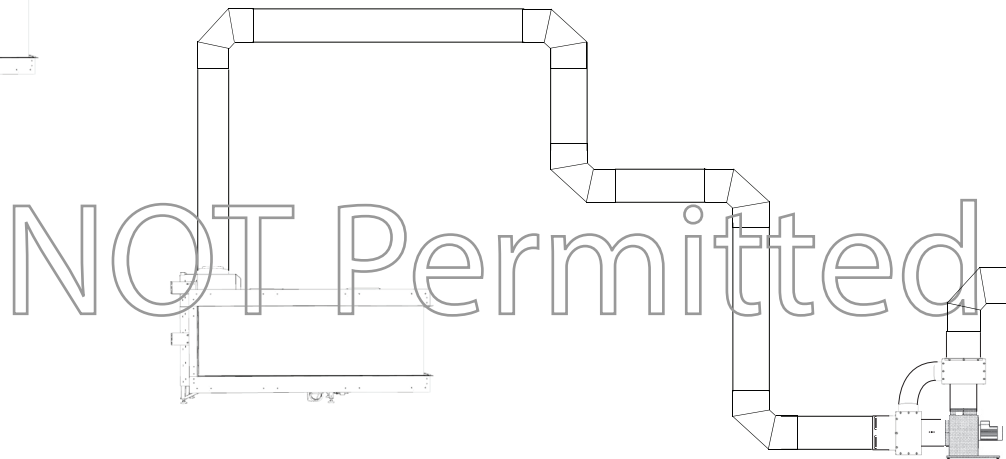
Figure 2. Configuration is Permitted - Length and Elbow Count Within Limits

VENTING REQUIREMENTS



NOT Permitted

Figure 3. Configuration is NOT Permitted - Too Many Elbows

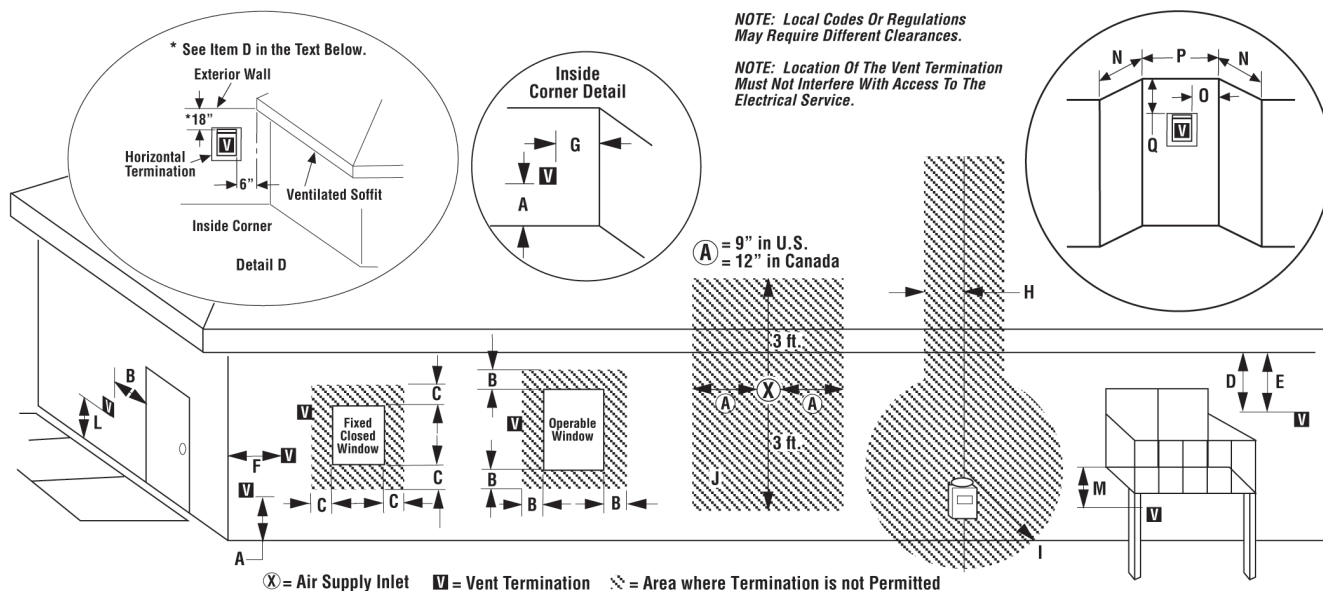


NOT Permitted

Figure 4. Configuration is NOT Permitted - Venting Goes Too Far Down, Too Many Elbows

VENTING REQUIREMENTS

HORIZONTAL VENT TERMINATION CLEARANCES AND REQUIREMENTS



NOTE: Local Codes Or Regulations May Require Different Clearances.

NOTE: Location Of The Vent Termination Must Not Interfere With Access To The Electrical Service.

	Canadian Installation*	US Installation**
A = Clearance above grade, veranda, porch, deck, or balcony.	12 inches (30cm)*	12 inches (30cm)**
B = Clearance to window or door that may be opened.	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 12 inches (30cm) for appliances > 10,000 Btuh (3kW)	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 9 inches (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 inches (30cm) for appliances > 50,000 Btuh (15kW)**
C = Clearance to permanently closed window	12 inches (305mm) recommended to prevent window condensation	9 inches (229mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 18 inches (458mm) from the center line of the termination	18 inches (458mm)	18 inches (458mm)
E = Clearance to unventilated soffit	12 inches (305mm)	12 inches (305mm)
F = Clearance to outside corner	5 inches (12.7cm) minimum	5 inches (12.7cm) minimum
G = Clearance to inside corner	2 inches (5.08cm) minimum - SV4.5HT-2	2 inches (5.08cm) minimum - SV4.5HT-2
H = Clearance to each inside of center line extended above meter/regulator assembly	3 feet (91cm) within a height of 15 feet above the meter/regulator assembly*	3 feet (91cm) within a height of 15 feet above the meter/regulator assembly**
I = Clearance to service regulator vent outlet	3 feet (91cm)*	3 feet (91cm)**
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 12 inches (30cm) for appliances > 10,000 Btuh (3kW)	6 inches (15cm) for appliances < 10,000 Btuh (3kW), 9 inches (23cm) for appliances > 10,000 Btuh (3kW) and < 50,000 Btuh (15kW), 12 inches (30cm) for appliances > 50,000 Btuh (15kW)**
K = Clearance to a mechanical air supply inlet	6 feet (1.83m)*	3 feet (91cm) above if within 10 feet (3m) horizontally**
L = Clearance above paved sidewalk or paved driveway located on public property	7 feet (2.13m)‡	7 feet (2.13m)‡
M = Clearance under veranda, porch, deck or balcony	12 inches (30cm)*‡	12 inches (30cm)‡
N = Depth of Alcove (Maximum)	6 feet (1.83m)*	6 feet (1.83m)**
O = Clearance to Termination (Alcove)	6 inches (15.2mm)*	6 inches (15.2mm)**
P = Width of Alcove (Minimum)	3 feet (91cm)*	3 feet (91cm)*
Q = Clearance to Combustible Above (Alcove)	18 inches (457mm)*	18 inches (457mm)**

* In accordance with the current CSA-B149.1 National Gas And Propane Installation Code.

** In accordance with the current ANSI SZ223.1/NFPA 54 National Fuel Gas Codes.

‡ A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

*‡ Only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:

INSTALLATION

INSTALLING the FAN and FAN CONTROLS

The **IPVS** is 'built-in-place' and is the last part of the venting system. The PV-WM-MAS-01 must mount, square and level, to the inside face of the exterior building wall with the male section projecting through the wall to engage the termination outside. When installed, it is recommended that the **IPVS** be oriented as shown below. The **IPVS** may also be 'laid on it's side with the fan shaft parallel to the ground.

Note:

- The PV-WM-146 fan motor must never be mounted down.
- The male end of the **IPVS** must connect *ONLY* to the termination cap.
- The PV-WM-MAS-01 must be mounted with at least 1" clearance to a combustible wall.

The PV-WM-146 fan is then mounted (usually hung from the rafters or floor joists) so as to engage its outlet with the inlet of the PV-WM-MAS-01. The power venter can be mounted with plumber's strap or threaded rod with nuts and washers, or it can be placed on support legs (included). Ensure that the parts are square, plumb and level, fasten the collar of the PV-WM-MAS-01 to the PV-WM-146 fan with at least 3 screws spaced 120 degrees apart and seal the joint.

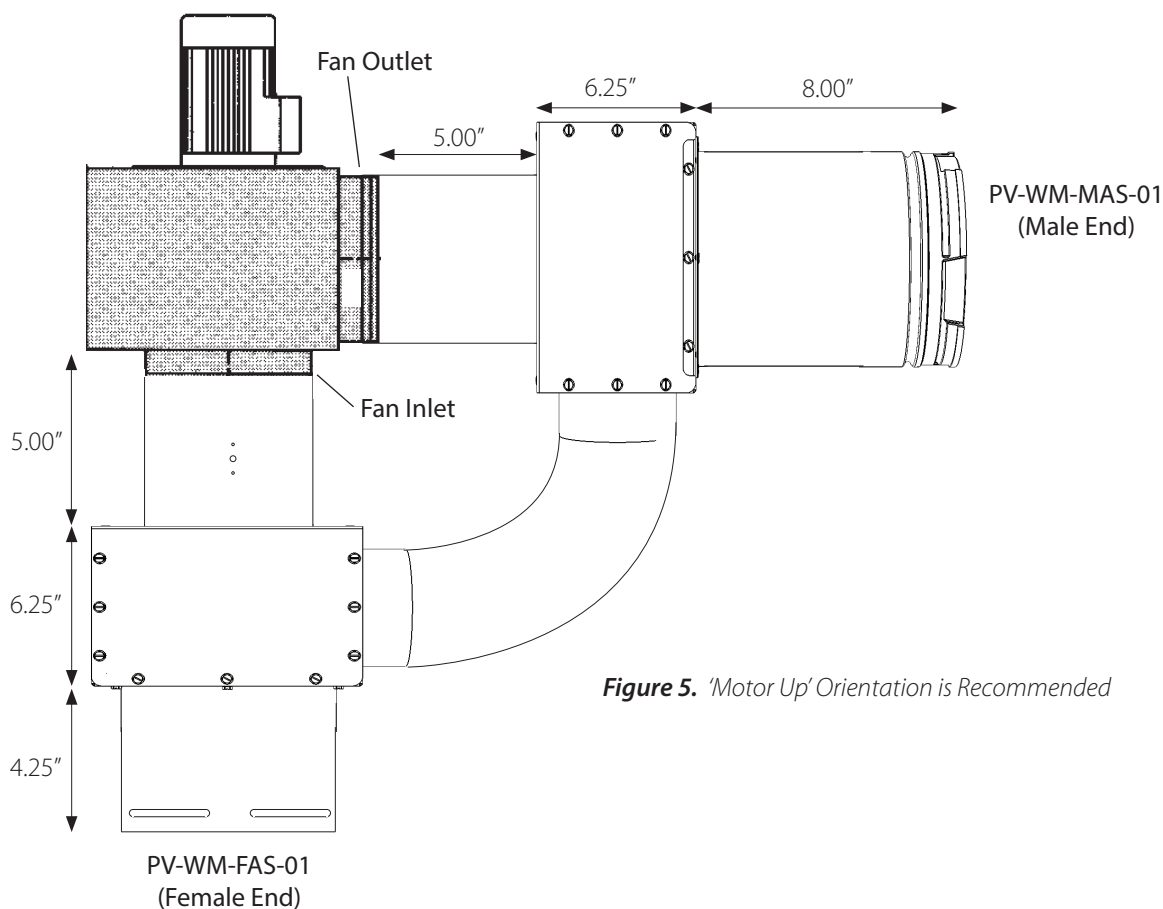


Figure 5. 'Motor Up' Orientation is Recommended

INSTALLATION

ENERVEX® Mounting of Power Venter

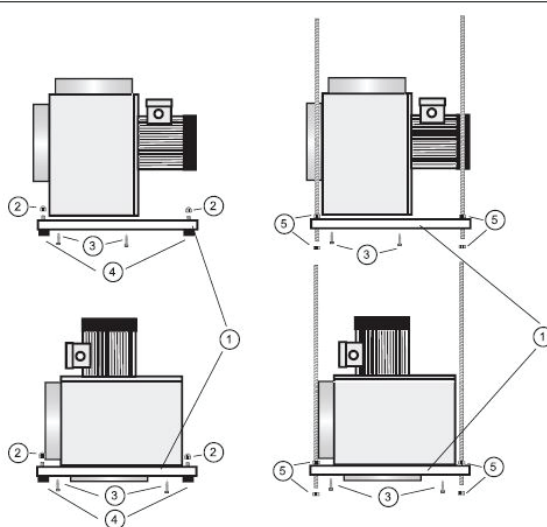
The power venter can be mounted with plumber's strap or threaded rod with nuts and washers, or it can be placed on support legs (included).

As Fig. 6 illustrates, the venter can be placed in virtually any position or direction, except with the motor pointing down. When placing the venter on the support legs (1), the vibration dampers (4) should be used and secured by nuts (2).

The support legs are attached to the bottom of the venter using the enclosed sheet metal screws (3). In this configuration, the venter is typically placed on a shelf hung from a wall.

If hanging the venter from the ceiling, threaded rods should be used. Attach the support legs (1) to the bottom of the fan and secure with the sheet metal screws (3). Do not use the vibration dampers. Instead, use the holes on the top of the legs for the threaded rods, and secure these with the nuts (5).

Figure 6.



Next, mount the PV-WM-FAS-01 to the PV-WM-146 fan. The PV-WM-FAS-01 should be firmly supported as local conditions allow. Slotted angle supported by threaded rod with nuts and washers is recommended. Ensure that the parts are square, plumb and level, fasten the collar of the PV-WM-FAS-01 to the PV-WM-146 fan with at least 3 screws spaced 120 degrees apart and seal the joint.

Attach one end of the Flexible Fresh Air Duct (provided) to the PV-WM-FAS-01 and the other end to the PV-WM-MAS-01 and secure each end with a worm-drive clamp (provided).

INSTALLATION

The **IPVS** arrives from the factory with the Stack Probe mounted onto the PV-WM-FAS. Push one end of the silicone tubing onto the Stack Probe for at least 1" and attach the other end to the negative port on the PDS 1.

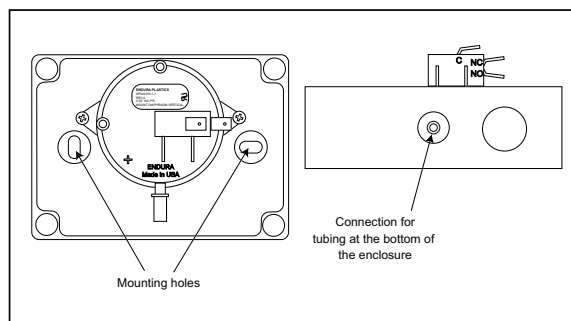
Note that the standard silicone tube length is 6 feet. This distance may be extended up to 25 feet by using ¼" rigid plastic or copper tubing as temperature allows (not supplied).

ENERVEX®

Installation of Proven Draft Switch (PDS 1)

The PDS 1 is for indoor installation only. The PDS 1 must be installed in a vertical position with the pressure connection pointing down. Secure the switch by using the mounting holes as shown on the figure. After installation connect the tubing from the probe onto the port marked accessible through the small of the plastic enclosure. Connect tubing to the NEGATIVE (-) port on the PDS.

Factory wiring comes with three wires that are already crimped onto the PDS. The purpose of these wires is to provide a point in which you can extend the length of the wire by using wire nuts and additional wire (not provided).



ALL OF THE SYSTEM COMPONENTS MUST BE INSTALLED OUTSIDE OF THE NON-COMBUSTIBLE MATERIAL ZONE OF THE FIREPLACE.

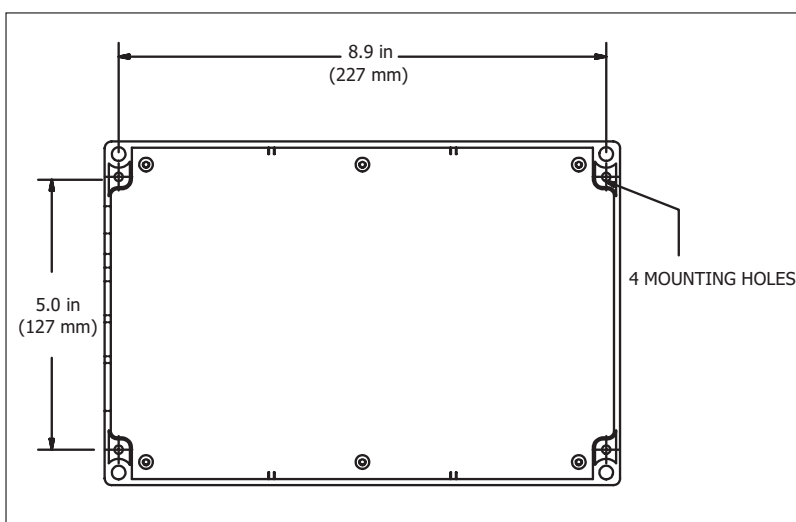
INSTALLATION

ENERVEX® Location

The ADC100 Control Unit must be installed indoors.

ENERVEX® Mounting the Control Unit

The ADC100 control may be mounted directly to a wall. To mount, remove the cover and locate the (4) mounting holes. Using the hole-pattern shown below, mount the control using #6 screws.



CONFIGURING THE PV-GS-CM-ADC 100

- Insulated wire jumpers are connected between terminals 7 and 9, between terminals 8 and 10 and between terminals 16 and 17. Ensure that these jumpers are in place on the PV-GS-CM-ADC 100.
- Adjust the fan speed with the ADC100 until your manometer reads -0.05" w.c.
- Each of the three DIP switches in the ADC100 should be set as follows:
 - 1 (Left) **OFF**
 - 2 (Center) **ON**
 - 3 (Right) **ON**

INSTALLATION



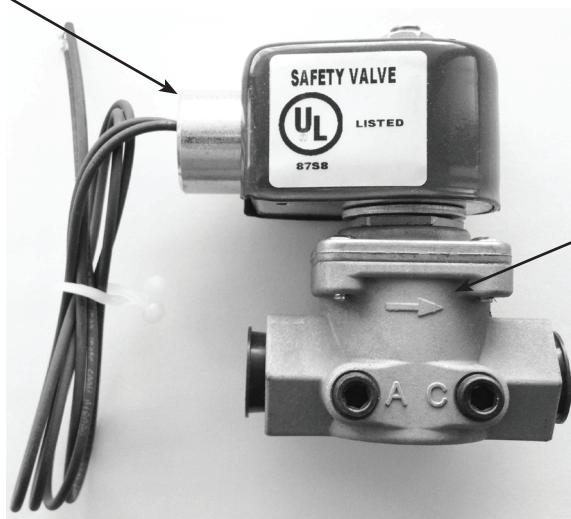
INSTALLATION MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

Note

Work with gas components must be performed by a licensed plumber or gasfitter within the Commonwealth of Massachusetts.

Electrical work must only be performed by a qualified, licensed electrician. Electric power must be turned off when making connections or performing any service.

Threaded for conduit connector.



The PV-GS-SGV-01 must be installed between the shutoff valve and the fireplace gas control valve in such a way as to ensure proper gas flow into the fireplace. Do not place the PV-GS-SGV-01 inside the combustible material zone around the fireplace. The PV-GS-SGV-01 must be connected to the electric supply with appropriately sized, armored electrical cable or conduit.

INSTALLATION

Note

Some jurisdictions require a disconnect switch near the fan. This switch is not provided with the **IPVS** but may be supplied locally and wired as in Figure 8. If provided, this switch controls the fan so the system will not work when this switch is off.

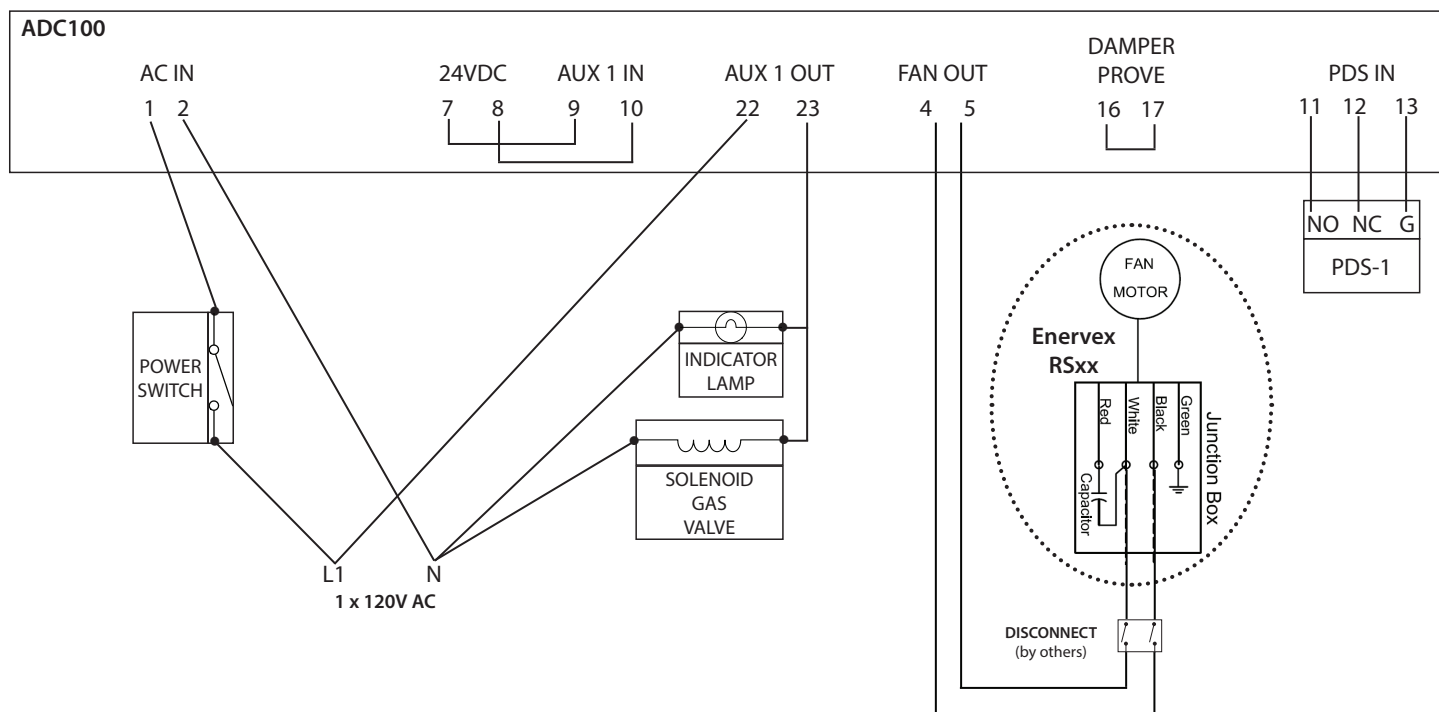


Figure 7. Wiring Schematic for All Installations

INSTALLATION

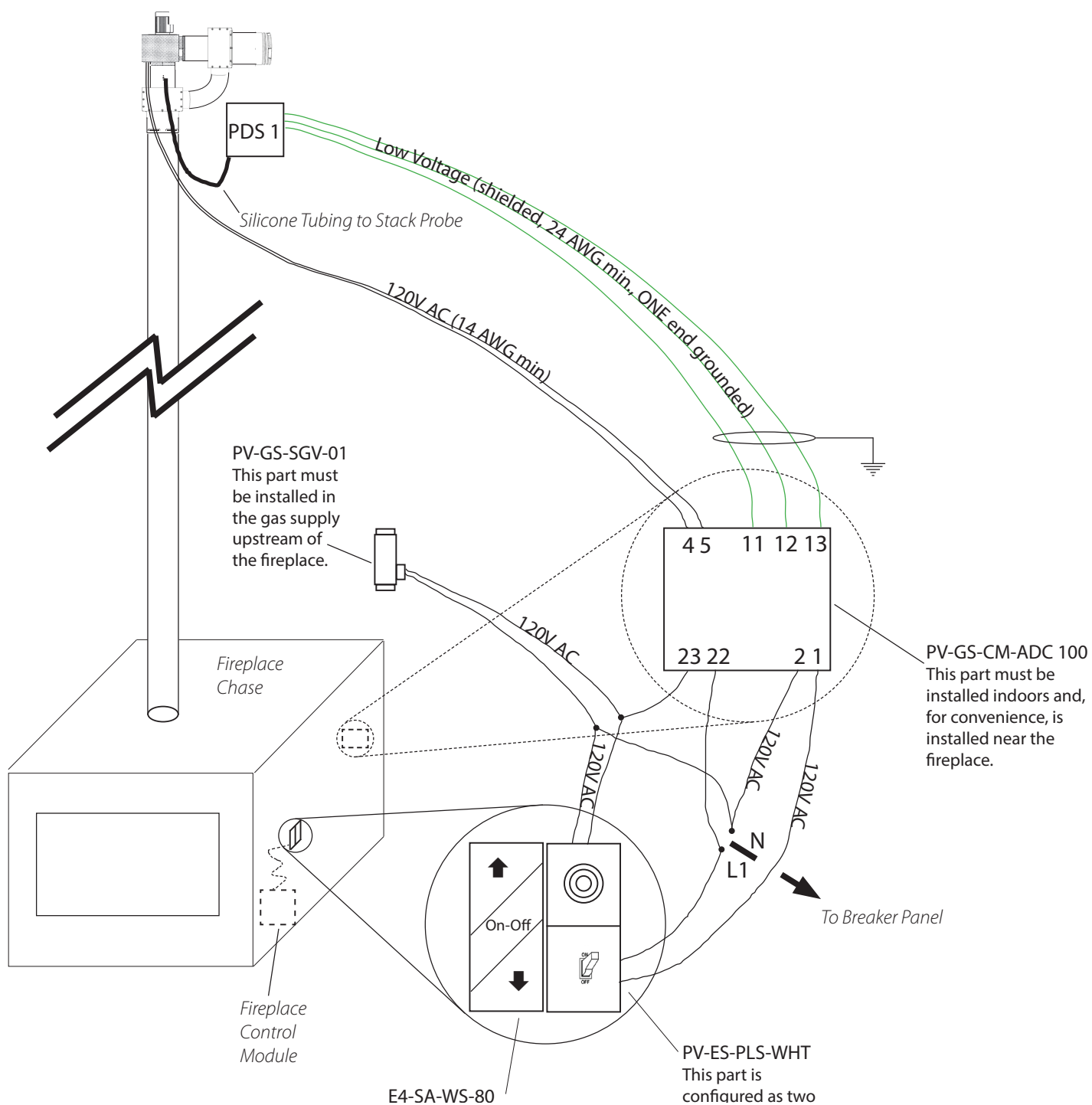


Figure 8. Wiring Illustration Showing Associated Connections

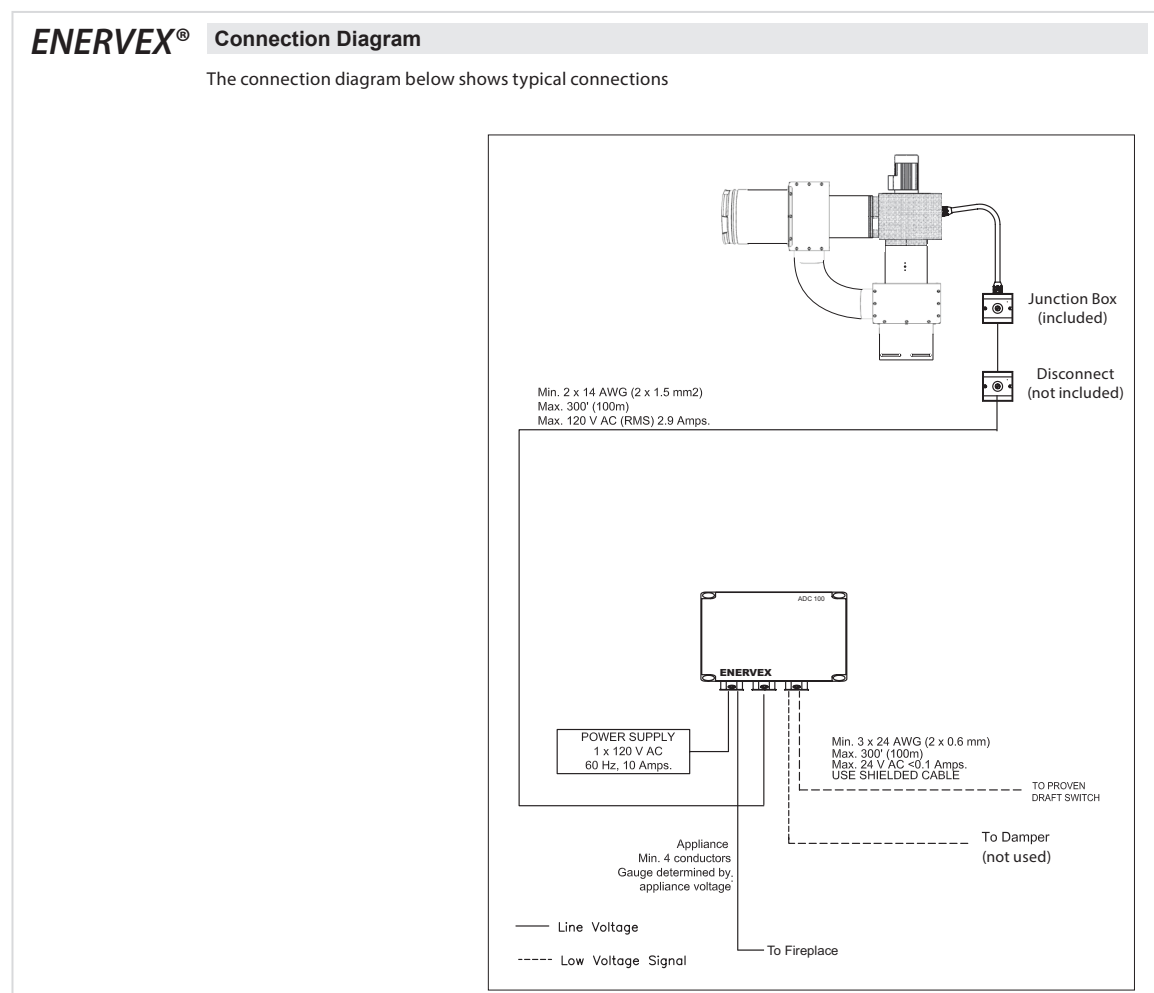
INSTALLATION

Figure 7 shows the electrical connections in schematic format with no attention to relative component mounting distances.

Figure 8 is an illustration which is intended to help the installer locate the components in an average installation.

While all parts are subject to local and national code restrictions and limitations some parts have distance limitations and requirements.

- The E4-SA-SW-80 wall switch has a low voltage, proprietary, built-in 26' connection cable which may NOT be modified or extended. The placement of this switch is limited by its cable length and it must be connected to the fireplace control module.
- The PV-ES-PLS-WHT-02 system switch should be placed next to E4-SA-SW-80 wall switch for convenience.
- The PV-GS-SGV-01 solenoid valve must be connected as close as practical to the gas control valve and after, as the gas flows, the gas shutoff valve.
- The PDS 1 stack probe may be extended up to 25 feet by using 1/4" rigid plastic or copper tubing as temperature allows (not supplied). The PDS 1 must be wired to the PV-GS-CM-ADC 100 with 3-conductor, shielded, 24 AWG cable; maximum length 300 feet.



INSTALLATION

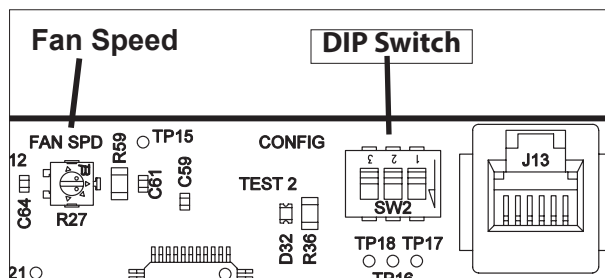


Figure 9. PV-GS-CM-ADC 100 Fan Speed and DIP Switch

Inside the PV-GS-CM-ADC 100 is mounted a system board in the upper right corner of which is mounted a fan speed potentiometer and a bank of three DIP switches. Each of the three DIP switches should be set as follows:

- 1 (Left) **OFF**
- 2 (Center) **ON**
- 3 (Right) **ON**

The **IPVS** must be set to produce at least 0.05" w.c. of *negative* draft pressure. After connecting a manometer (not included) to the system (follow the instructions for the manometer) adjust the fan speed potentiometer until -0.05" w.c. pressure is reached.

Final Step: Ensure all connections are correct, secure all parts and test system for proper operation.

OPERATING the SYSTEM

TURNING THE SYSTEM ON

Turn the PV-ES-PLS-WHT-02 switch to the ON position. The fan will provide negative pressure (draft). Once the fan has generated enough draft to reach the draft set-point, the PV-ES-PLS-WHT-02 indicator lamp will light and the PV-GS-SGV-01 valve will open. The gas fireplace is now ready for normal operation via the E4-SA-WS-80 wall switch or the remote control.

The E4-SA-WS-80 wall switch has three buttons on it; On/Off, UP flame, DOWN flame. Press the On/Off button to begin the start-up sequence. After the main burner has lit the UP flame or DOWN flame button may be used as desired. Note that on multiple burner models the secondary burner(s) cannot be controlled by the wall switch, the remote control must be used.

TURNING THE SYSTEM OFF

First, turn the gas fireplace off using the either E4-SA-WS-80 wall switch or the remote control then turn the PV-ES-PLS-WHT-02 switch OFF. The indicator lamp and the gas both turn off.

USING THE REMOTE CONTROL ELECTRONIC IGNITION SYSTEM

Note: The system shuts off the appliance completely if there is no change in the flame height for 5 days.

Setting °C/24 Hour or °F/12 Hour Clock.

Press **OFF** and **↓** to toggle between °F/12 hr and °C/24 hr clock.

Setting the time.

Simultaneously press the **↓** and **↑** buttons, the display now flashes.

Press **↑** to set the hour and **↓** to set the minute.

Press **OFF** to return to manual mode.

Igniting the Appliance.

On the remote control, simultaneously press and hold the **OFF** and **↑** buttons.

An acoustic signal indicates that the start sequence has begun.

The electronic system then checks that the main gas is flowing and ignites the main burner; this may take up to 20 seconds.

NOTE: During start-up, the *MANUAL* knob on the gas valve cannot be in the **MAN** position.

Changing the Mode of Operation.

Briefly pressing the **SET** button changes the mode of operation in the following order:

Man - **Temp** - **Timer** - back to **Man**

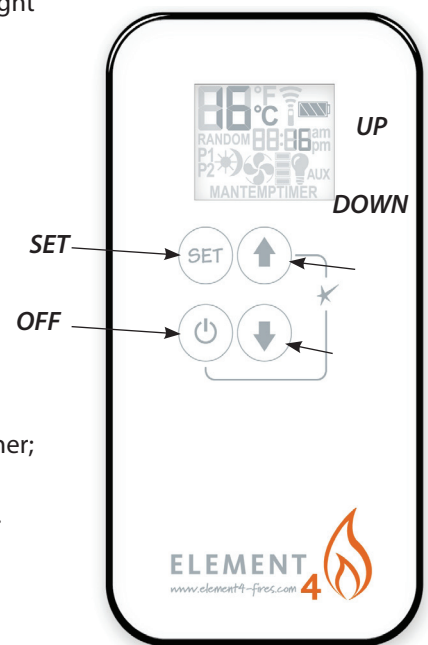


Figure 10. Remote Control

OPERATING the SYSTEM

☼Man - Manual Flame Height Adjustment.

You are now able to use the remote control. To increase the flame, the **▲** button should be depressed. Pressing the **▼** button on the handset will reduce the flame. The main flame may be lowered all the way down until it is off, leaving only the pilot ignited.

Fully Extinguishing the Appliance

From any heat setting, press the **OFF** button for a few seconds. This will cause the burner to fully extinguish. The system has a safety interlock which will not allow the ignition until the interlock rests. This may take a few minutes. The appliance should be shut off completely using the **OFF** button on the handset and not left on pilot only, except for temporary use. This resets the system and all safety features.

☼Temp - Daytime Temperature mode.

The appliance must be in standby mode; pilot ignited. The room temperature is measured and compared to the set temperature. The flame height is then automatically adjusted to reach the daytime set temperature.

☼Temp - Nighttime setback Temperature mode.

The appliance must be in standby mode; pilot ignited. The room temperature is measured and compared to the nighttime setback temperature. The flame height is then automatically adjusted to achieve the nighttime setback temperature.

Timer mode.

The appliance must be in standby mode; pilot ignited. The Timer setting allows you to set 2 burner **☼Temp** times and 2 burner **☼Temp** times every 24 hrs.

For **☼Temp** to operate as a thermostat, TEMP must be set at 4°C or higher.

If the **☼Temp** setting is decreased to --, the motor will turn the valve to the standby position in the moon times and await the next burner **☼Temp** cycle.

Setting the Temperature.

Select either the **☼Temp** MODE or the **☼Temp** MODE by briefly pressing the **SET** button.

Hold the **SET** button until the TEMP display flashes.

Set the desired temperature with **▼** or **▲**.

Press **OFF** to complete the program.

Setting the Timer.

Select Timer mode by briefly pressing the **SET** button.

Press and hold the **SET** button until the P1☼ is displayed, and the time flashes. Set the hour by pressing **▲** and set the minutes by pressing **▼**.

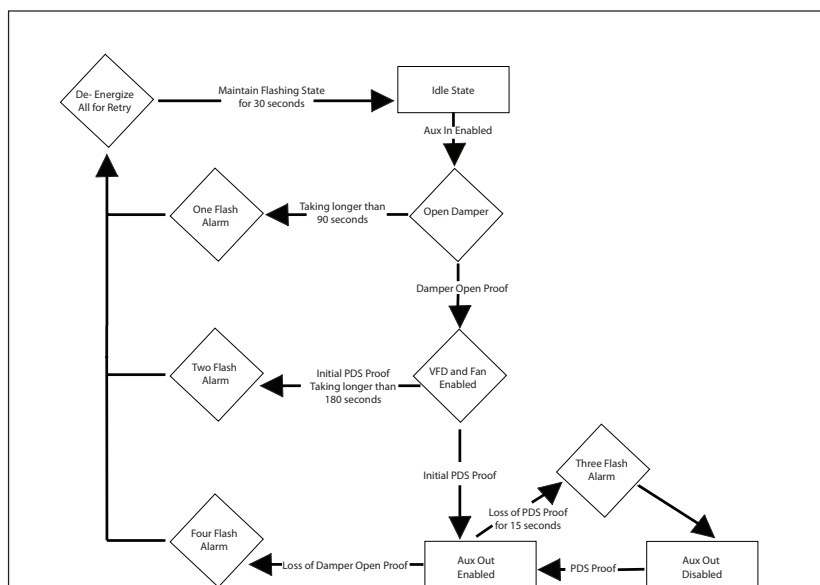
Briefly press **SET** button for the next burner cycle time.

Once all 4 times are set, press **OFF** to complete the programming.

TROUBLESHOOTING

ENERVEX® Sequence of Operation

The sequence of operation flow chart



Alarm Stages

Flashes 1 - if damperprove does not close 90 seconds after auxin, go into alarm for 30 seconds, followed by a full retry

Flashes 2 - if initial pdsprove does not close 180 seconds after damperprove, go into alarm for 30 seconds, followed by a full retry

Flashes 3 - if pds loses proof for 15 seconds after initial pdsprove, auxouts de-energize, stay in alarm until pdsprove returns and auxout will re-energize

Flashes 4 - if at any point after auxout proves the damperprove is removed, the board immediately goes into alarm for 30 seconds, followed by a full retry

Flashes 5 - *must have sw3 on* if pds is proved prior to auxin, board will go into alarm and no further states can be achieved until proof is removed

Start

Sequence

1. A call for heat from the appliance energizes the ADC100 inputs at terminals 9 and 10.
2. If a damper is connected, it begins to open. Once open, the damper prove contact closes (Terminals 16 and 17).
3. The ADC100 begins to ramp up the fan.
4. The Proven Draft Switch closes when adequate draft is achieved and ADC100 adjusts fan to speed setting on the potentiometer.
5. The ADC100 control releases the appliance for operation by closing dry contact between terminals 22 and 23 (and terminals 29 and 30).

Operating

Sequence

Manual Mode:

1. Fan runs at a constant speed and can be adjusted during normal operation using the potentiometer.
2. If the Proven Draft Switch opens, a 15 second timing cycle starts.
3. If the Proven Draft Switch has not been made within 15 seconds, the auxiliary out contact opens and an alarm condition exists.
4. If the Proven Draft Switch closes, the control automatically resumes normal operation at set speed.

TROUBLESHOOTING

Automatic Mode:

1. Fan runs at speed setting of the potentiometer but cannot be adjusted using the potentiometer during operation.
2. If the Proven Draft Switch opens, the fan begins to ramp up.
3. If PDS closes, fan speed remains at that speed.
4. If the PDS has not closed by the time the fan has ramped up to 100% speed, a 10 second timing cycle begins.
5. If PDS does not close within 15 seconds the auxiliary out contact opens and an alarm condition exists.
6. If the Proven Draft Switch closes while the control is in alarm, the fan will resume the original speed setting.

Shutdown 1. The call for heat signal from the appliance is turned off.

Sequence 2. Fan output continues at pre-set speed for the set post purge time (0-3 minutes).
3. Fan output is set to zero.

ENERVEX® Operating Pressure

The operating pressure of the ADC100 Control is determined by the PDS switch. The PDS-1 used with the ADC100 has a pressure setting of 0.05" W.C. +/- 0.03" W.C. As long as the pressure is within this range, the fireplace and/or appliance will continue to operate. Should the pressure fall outside of this range, it may be necessary to adjust the fan speed. The user may use a manometer or other device to read the pressure inside the stack.

For fireplaces, a standard smoke/ flame test should be performed before normal operation (specified in appliance manual). This test will determine if the fan is running at the correct speed.



6. Maintenance and Troubleshooting

Observation	Problem	Solution
Heating appliance/ fireplace cycle on and off	- Potentiometer setting is too low	- Turn potentiometer clockwise to increase fan speed.
Fan is 'hunting' (increasing speed and then decreasing speed constantly)	- Fan speed control is set too low. - Draft in chimney fluctuates.	- Increase potentiometer setting. - Move Stack Probe closer to fan.
Fan will not come on	- ADC100 is not wired correctly - There may be sufficient natural draft - Fan is not working	- Check wiring and correct - If the PDS is closed when the start signal is applied, sufficient natural draft exists for the fan to run. The ADC100 can run the fan even during these conditions if dipswitch #1 is set to the ON position to initialize a PDS check during the start up sequence. - Check the fan and if necessary, repair or replace. Verify all wiring to fan and control is correct and control is receiving external power.
Heating appliance or fireplace will not come on	- Fan is not working - No power to the ADC100 - Proven draft switch is not properly connected to the chimney. - PDS is not working	- Check the fan and if necessary, repair or replace. Verify all wiring to fan and control is correct and control is receiving external power. - Make sure the probe is properly inserted into the stack, so the tip of the probe is flush with the inside of the chimney. - Replace relay or switch
Heating appliance/ fireplace will not shut off	- ADC100 is not wired correctly	- Check wiring and correct.

APPENDIX A

European Home Warranty for The **External** Power Vent Systems

European Home warrants the gas controls and burner of the **Internal Power Vent System** against defects in materials and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. If a defect exists, at its option, European Home will (1) repair the product at no charge, using new or refurbished replacement parts or (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product. A replacement product/part assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes the property of European Home.

Nothing in the above shall be deemed to imply that this warranty shall apply to work which has been abused, or neglected or shows evidence of changes or modifications by others with or without permit, damages caused by the acts of God, building settlement or moving, fire or vandalism. In addition, installation of this product that varies from the requirements stated in the instruction manual will void the warranty.

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NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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